VOL. 6 (VI, B) NO. 1 (7) JULY, 1967

NORTH AMERICAN JOURNAL OF NUMISMATICS

THE TURTLE

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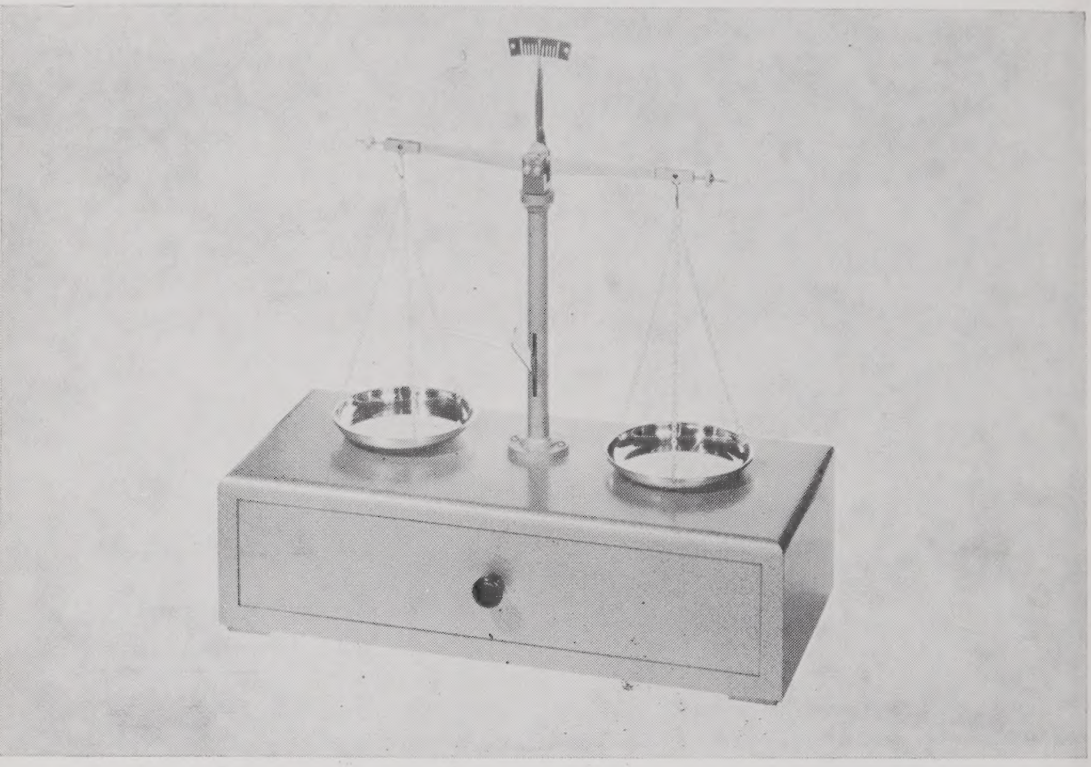

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NORTH AMERICAN JOURNAL OF NUMISMATICS

A PUBLICATION OF THE ANCIENT COIN CLUB OF AMERICA

VOL. 6 (VI, B) NO. 1 (7) JULY, 1967

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Cover Coin: Small bronze Fl. Delmatius (Caesar under Constantine I from 335-337 AD). Inscr.: FL. DELMATIUS NOB (ilissimus) CAES (AR). Rv. Inscr.: GLORIA EXERCITVS. Mint mark: SMH (= Heraclea). Photo courtesy of David Hardy.

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From the Editor's Desk

There have been enough new readers added to our lists since last we discussed the subjects of grading and coin forgeries to make it worthwhile to repeat the ACCA attitudes on these subjects for the benefit of these same new members.

The subject of grading relates to the attempt of coin collectors to discover some system whereby coins may be described as to their state of preservation. While it is possible perhaps, though we are not so sure, to develop some such system for modern machine produced coins, it is not possible for ancient coins which are individually produced and in a sense unique specimens.

The idea of a universally agreed upon system for briefly describing coin condition would be quite desirable. Since coins are frequently bought and sold sight unseen, such a system would militate against any dispute between the parties of such a transaction. Since it is impossible to thus describe a coin some other method must be sought.

The *Turtle* therefore does not countenance discussion on the subject of grading. It is felt that such discussion is essentially futile and those whose interest is in such subjects rather than the history and background of their coins have motives that are perhaps not in accord with those of the majority of our readers.

At the same time, the ACCA desires that relations between those who buy and those who sell coins be maintained at a high level. Dealers who advertise in the *Turtle* tacitly permit returns of coins within a limited period with no questions asked. Many dealers send coins on approval, particularly where the buyer has gone to some effort to establish himself and his credit with the dealer.

Our March 1965 editorial which stated the club policy on the subject allowed that the "golden rule" was the only rule which could be applied in the buying and selling of ancient coins. There is no rule discovered in the past two years which serves to supersede this.

It might be worthy to note at this point that the Club has been asked to intervene only twice in three years in disputes between two members. In both cases, rather than being disputes, these were misunderstandings which were quickly cleared up. We think that new members will discover that

our dealers and other members are not anxious to gouge the last dime from a neophyte, but rather are much more interested in assisting him in getting more enjoyment from his avocation.

The ACCA policy in regard to forgeries is severe and adamant. We will not accept advertising for reproductions in any form. Dealers or members who handle forgeries face the imposition of such santcions as the ACCA is able to bring about. The *Turtle* prints news of large groups of forgeries or the appearance of forgeries when the source of these is known so that all readers can be alert.

The *Turtle* would like to print articles which permit readers to know more about forgeries and their detection, yet the range is so broad and the skillful detection of forgeries so based upon experience in handling coins that we have not been able to find much material which would be helpful to readers in expanding their knowledge of fakes and their detection.

The best way for beginners to avoid forgeries is to deal with reputable dealers who stand behind the merchandise they sell and to avoid bargains from unknown people.

Finally we ought to repeat a word regarding copyrights. As most readers have noted, the material which appears in the *Turtle* is copyrighted by the publishers. This copyright is *for the protection of the magazine and its authors against unauthorized reproduction of their material.* There is nothing in that copyright which deprives the author of his rights to his own material. The rights to all articles published remain with the author.

JOHN E. HARTMANN, Editor

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Homer's Odyssey and Numismatics

Joseph E. Bush

The perpetual appeal of the *Odyssey* is in the endless struggle of Man against the elements, the Gods and Chance. It is hard to explain why revering Homer so, the Greeks gave no great amount of numismatic recognition to the author and his story. A check in the library at the American Numismatic Society showed only a study "Homeric Coins," on coins referring to the author himself.

No less than seven cities have claimed being Homer's birthplace. Six of these issued coins commemorating him, as did two other cities. The coins usually depict him as a minstrel or a poet, although a few assign him Olympian attributes. It is certain that none of them is his actual portrait for they all are of bronze Hellenistic vintage, the oldest being either Ios or Amastris, circa 300 B.C. The coins continued to be struck down to the Roman domination of the Greek city-states.

Homer gets far more recognition than his hero and his theme. To illustrate the story very little material can be found. Certainly Zeus, Athena, Poseidon, and Hermes can be found on many of the Greek coins. Helen, the ostensible cause of the Trojan war and of Odysseus' consequent wanderings is depicted on a silver piece of Tyndaris (396-345 B.C.) as well as on a small bronze along with the Dioscuri. She is not in the *Odyssey*, however, except by mention, although Nausicaa is. But as Head tersely says in his index of *Historia Numorum* under Lesbos—"Nausicaa (not the Homeric)." Penelope, Telemachus, Circe and Cyclops are likewise absent. A secondary figure of Silenos as a hanger-on of the Cyclops appears on a coin of Aetna (Catana), silver litra of c.476-461 B.C.

Odysseus himself appears as a sailor-like figure with a tall conical hat, resting on a spear, as well as a conventional bust. These representations are all on small bronzes of the 3rd and 4th centuries B.C. from his traditional home in Ithaca.

In spite of all this it is possible to show parts of the *Odyssey* and use several other coins as suggestions. Following the route plotted by Ernle Bradford in his *Ulysses Found*, let us look at the possibilities.

First, in the "Lotus Eaters," the food itself is very likely some sort of bread. While it was not made from the now extinct silphium plant, it could be used as a symbol of the

times. Various coins of Cyrene were coined from 530 B.C. onwards, both in silver and bronze, depicting this plant.

The coins of Eryx in Sicily have no direct reference to Polyphemus the Cyclops although they are geographically the closest in space to that adventure. This area was noted for its wine, hence, Silenos. Perhaps he learned wine making from Odysseus? Odysseus slaying a ram shown on an electrum coin of Cyzicus (Mysia) circa 450-400 B.C. could possibly be worked in here.

Aeolus and his winds do not appear, while the cannibals of Lamos, equated by Bradford to Sardinia, had no Greek cities or coinage. Circe herself is not honored, although Odysseus' stay could be symbolically represented by coins bearing grapes and swine. The city of Signia in Latium had a coin of 300-280 B.C. depicting Silenos and a boar and a bronze unica of Iguvium, c.286 B.C. shows grapes.

On the subject of the journey of Odysseus to Hades—the end of the world—marked by the Pillars of Herakles, Gades the "oldest European city" has a silver coin (250-206 B.C.) showing the Tyrian Herakles. Teiresias, the prophet, does not appear.

The Sirens, originally shown on vases and monuments as birds with women's heads or women with bird legs and wings, leave us with but a tenuous selection of a silver didrachm of Neapolis (Campania) of 450-340 B.C. and a head of a nymph —the siren Parthenope?

Scylla definitely appears as a symbol on the coins of Cumae (Campania) 480-423 B.C., Agrigentum (Sicily) 413-406 B.C. and Thurium (Lucania) 460-350 B.C., with a human head and a snake-like body. Returning to Sicily again for the Isle of the Sun cattle story, bronze coins of Tauromenium 358-275 B.C. show Apollo and a Bull, a most satisfactory combination.

If we accept Melita (Malta) as Calypso's isle we will have to be satisfied with several small bronzes of a "veiled human head" coined after 218 B.C.

While Nausicaa is not shown on any coins of Corcyra—the kingdom of the Phaeacians—staters and drachms (584-450 B.C.) bearing what is termed a "stellate device" possibly representing the garden of Alkinoos can suggest Odysseus' most pleasant stay there. Finally a small bronze of 300-229 B.C. bearing a forepart of a galley and on the reverse, a kantharos, could be forced as an illustration of the ship used to get Odysseus home.

For the events after the return, the Roman coins of gens Mamilia—C. M. Limetanus (82-79 B.C.) represent Odysseus

in beggar garb and staff stretching his hand to his old dog Argus. The scene is certainly one of the most touching to ever appear on a coin. To illustrate the contest with the suitors in the shooting of an arrow through the double row of axes, we have only the labrys as a symbol on a Mylasa (Caria) bronze of the third century B.C.

With victory over the suitors accomplished, Odysseus must carry out his vow—to carry an oar so far inland men will mistake it for a threshing fan. On a coin of Mantinea (Arcadia) circa 370 B.C., Odysseus wearing a conical hat, tunic gathered at the waist, spear in hand, plants an oar in the earth. The wanderer is home from *the sea—and evidently glad of it.*

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A Numismatist In Turkey

MARCUS C. BRUHN*

Modern Turkey is in some ways a Mecca beckoning the numismatist to its ancient cities. The number of collectors who search for rare coins must be legionary, and while vast numbers of ancient coins have been taken out of Turkey, massive amounts remain. Daily the spade of the excavator turns up some new find and even greater finds result from commercial excavations for highways, buildings and the laying of pipes. Even a simple bit of digging for a basement may bring to the surface some interesting coins which someone is waiting to purchase. Many of these coins find their ways from local agents to London, Paris, Amsterdam, Basel, Zurich and Hamburg. Fortunately, as has been observed before, as the demand for ancient coins increases, so the supply increases, and much of this increase is due to the finds in Turkey. Of course there is some absolute number of coins, but it may take another two centuries before the supply begins to be exhausted, except for the 1-2% of coins which I suppose may never be discovered at all.

My trip to Turkey in 1963 brought me into the possession of some 300 Greek and Byzantine coins, largely bronze. During the six weeks of my sabbatical leave my wife and I visited such unforgettable places as Istanbul, Bursa, Pergamum, Smyrna, Ephesus and Ankara, and had considerable opportunity to look for coins. Our travels took us to many a Hellenistic temple and amphitheatre on some acropolis so reminiscent of Shelley's "glory that was Greece and the grandeur that was Rome!" A galaxy of other cities—Didyme, Tralles, Colophon, Priene, Miletus, Halicarnassus, Aphrodisias and Hierapolis—are in store for us when we return.

In the Middle East one sees many coins for sale in the bazaars. In a large city like Istanbul there are several of these, the Grand Bazaar being the largest and most famous. Small shops are grouped according to type of business and one can get lost easily in this 400 year old structure which covers 20 acres. It consists of a virtual labyrinth of streets and alleys which are so extensive and intricate that a guide is most helpful, if not, in fact, absolutely necessary. The main part of the bazaar is domed, and in the roof are many small domes which admit a subdued but pleasant light. This is particularly favorable to some of the merchants who sell soiled or inferior goods. It is amazing to see pots of ancient coins

in some antiquarian shop and you may be sure you will be offered tea (the Turks call it "chi") as you leisurely bargain for those in which you are interested. With some skill in bargaining, you may pay just half of the initial price. Often you are whisked away from one stall to another by the agents of a competitor and you may find yourself looking over the stock of gold merchants or other exclusive dealers. But many interesting bronze coins can be purchased for fifteen to seventy-five cents, and my average price for bronzes was fifty cents or 5 Turkish lira.

As there are many false coins for sale, one must buy defensively at times, particularly in silver. I was told that a large supply of forgeries reaches Turkey from Greece and Italy via Rhodes and Izkenderun as well as Izmir (Smyrna). The Arabs also do very well in copying ancient coins. The Turks of course claim not to be in this business on any great scale. When in Bursa, I bought a beautiful copy of an Alexander III drachm of the Ephesus mint. The dealer told me that this coin and several like it had been found in a coal shaft. Possibly the dealer was honest and had himself been taken in, but when I showed the coin to Mr. David Sear of the British Museum, he said it was a beautiful piece, but false. His decision turned largely on the fact that the legend was too fine. He mentioned that on a trip to Rhodes a few years before he had seen many false coins being offered to tourists. The bronze coins, being both plentiful and cheap are seldom counterfeited, but any substantial purchase of gold, silver or the rarer bronzes should be left to the expert unless you have seen the coins coming from a nearby excavation.

With the continued development of tourism in Turkey, and further improvements in highways and motel and hotel accommodations, more and more Europeans and Americans are travelling there. The fantastic accumulation of historic treasures, the variety of breath-taking scenery and the friendly inhabitants make a trip there most enjoyable. Turkey is also delightful because it is still quite unspoiled, being off the main tourist route. And for the numismatist it is memorable for its museum collections of coins, especially that of the Greek and Byzantine coins in the Archaeological Museum in Istanbul, originally owned by the Sultan and world renowned.

*Dr. Bruhn is a professor of economics at Augustana College.

SUPPORT THE ACCA AUCTION

Coins and Medals of the State of the Ionian Islands

by

P. S. Lambros

(Continued from Vol. VI, No. 2, pp. 53-58 and No. 3, pp. 91-94)

The mint referred to in the above resolution was established in the suburb of Corfu, Garitsa. From it there were issued only copper coins of one, five and ten gazzettes, which are described below.

4. *Obv.* (Plate I. Inscr. A) Front view of the winged lion of Saint Mark, holding in his front paws the book of the Gospel with the seven arrows.

Rev. In three lines. (10 Gazzete, See Pl. I, Fig. 1 and Inscr.) In circle of oval dots. Copper. 17.129 gm.

5. *Obv.* (See Inscr. B. Pl. I., Fig 2). Front view of the winged lion of Saint Mark, haloed, holding in his front paws the book of the Gospel with seven arrows.

Rev. In three lines. (10 Gazetais, See Pl I., Fig. 2 and inscr.) In circles of oval dots. Copper. 36.121 gm.

6. *Obv.* (See Inscr. B. Pl. I, Fig. 3) Front view of the winged lion of Saint Mark, haloed, holding in his front paws the book of the Gospel with the seven arrows.

Rev. In three lines (5 Gazzete, see Pl. I, Fig. 3, Inscr) In circle of oval dots. Copper. 23.236 gm.

7. *Obv.* (See Inscr. B. Pl. I., Fig 4) Front view of the winged lion of Saint Mark, haloed, holding in his front paws the book of the Gospel with the seven arrows.

Rev. In three lines (5 Gazzetes, See Pl. I, Fig 4, inscr.) In circle of oval dots. Copper, 22.822 gm.

8. *Obv.* (See Inscr. B. Pl. I., Fig. 5) Front view of the winged lion of Saint Mark, haloed, holding in his front paws the book of the Gospel with the seven arrows.

Rev. In three lines (1 Gazzette, See Pl. I, Fig. 5, inscr.) In circleof oval dots. Copper. 3.855 gm.

9. *Obv.* (See Inscr. B. Pl. I, Fig. 6) Front view of the winged lion of Saint Mark, haloed, holding in his front paws the book of the Gospel with the seven arrows.

Rev. In three lines. (1 Gazzeta, See Pl. I, Fig. 6 inscr.) In circle of oval dots. Copper, 5.589 gm.

10. *Obv.* (See Inscr. B. Pl. I, Fig. 7) Front view of the winged lion of Saint Mark, haloed, holding in his front paws the book of the Gospel with the seven arrows.

Rev. In three lines. (I Gazzeta, See Pl. I, Fig. 7, inscr.)

A. ΕΠΤΑΝΗΣΟΣ ΠΟΛΙΤΣΙΑ

B. ΕΠΤΑΝΗΣΟΣ ΠΟΛΙΤΕΙΑ

The value number on coin number 1 is not too distinguishable and this issue is so rare that I haven't seen a second specimen from the same dies to make certain whether it is 5 or 10 gazzettes. Traces indicate, more or less, the number 10. But because its weight is even smaller than 5 gazzettes and the inscription incorrect, I'm inclined to consider it as a strike-proof and believe that no actual coins were issued from those dies.

On both the official flag of the state of the seven islands and the state crest the flying lion of Saint Mark of Venice was preserved. The same lion was used also as the obverse type of the coins and the name of the coinage unit *gazzette* introduced by the earlier coinage struck in Venice for the possessions in the Ionian Sea was also preserved. These earlier coins of the Venetian period were struck from copper in the mint of Venice from ca. 1730 and the following years, and they are examined in detail in the appendix of the present work. In the resolution of the Senate of the Seven Islands mentioned above, there is no mention of the relative value of the gazzettes to the other gold and silver coins. It is almost a sure possibility that this relation was the same as the known one of the gazzettes struck by the Venetians (See Pl. 1, 8) according to which the Venetian taller equalled 240 gazzettes, which correspond to one half of a Venetian gold zecchino. Not long after the events discussed earlier, there arrived in Corfu as plenipotentiary representing the Emperor of Russia (accompanied by a Russian army) G. Mocenigo, to whom was entrusted the work of the organization and pacification of the Ionian Islands. He started his work with much zeal and demonstrated great administrative ability. In his effort to organize the islands, Mocenigo created a constitutional committee with 40 seats, the members of which were elected by the people. This committee wrote the new constitution of the Ionian state which was put into effect officially on December 6, 1803. Upon this constitution, the president elected after the death of Theotokis, Antonios Komoutos took the presidential oath.

Order was established and the affairs of the new state were developing well until the moment that a new legislative assembly, created by an illegal intervention of the senate, voted a new constitution. This constitution, favoring the aristocratic party, gave the Ionian aristocracy more rights and titles, and Russia appeared more eager to accept it than the previous one.

Mocenigo, as plenipotentiary of Russia in the state of the Islands was looking, of course, after the interests of the Em-

peror of Russia, but as a Greek he also was concerned with the improvement of all the branches of public service and especially with trying to push forward public education. Proof of this aim are two medals struck in Corfu in 1806. Both were created as awards for students who had distinguished themselves in the course of their studies. The first was awarded by the Senate of the state and the second by the Russian plenipotentiary in person. Both are described below.

11. *Obv. In the 6th year of the State. Kerkyra.* Pegasus to left.

Rev. (In five lines) *The Senate to the youth loving letters and arts , for the upraising of hopes.* Within an olive wreath. Silver. In the collection of the author.

12. *Obv. (In) the 6th year of the Ionian State.* Head of Athena to right. Under it prow of trireme.

Rev. (In five lines) *The Russian plenipotentiary to the youth for his (distinction in) study.*

Within an oak wreath. Bronze. In the collection of the author.

* * *

We are now at the eve of a great European war. Russia allied with England, Austria and Prussia, proclaimed war against France. When Napoleon and Alexander of Russia signed the Treaty of Tilsit (July 26/8, 1807) the Ionian Islands were given to France.

Napoleon, who was eager to reoccupy Corfu, had given special instructions to his brother Joseph, King of Naples, to act with all possible speed to this effect. Two French officers were sent immediately to bring the news to the Russian plenipotentiary at Corfu. Mocenigo, on August 30/33, 1807, notified the Senate of the agreement between the two emperors changing the political rule of the Ionian Islands and announced that the French army would occupy the territories of the republic immediately after the withdrawal of the Russian forces. To this Mocenigo added that after this announcement there would be no more relations between him as plenipotentiary of Russia and the government of the State of the Seven Islands relative to military and civil administration.

On August 5/17 a group of small ships carrying fifteen French soldiers left Otranto and after three days of sailing arrived at Corfu. On August 11/23 Commander General Cesar Berthié arrived with the rest of the occupation forces. Although Napoleon expressed his wish that the constitutional government of the Seven Islands be preserved, Berthié, immediately after he took possession of the forts and fortresses, ordered the flag of

the Ionian state to be lowered and raised the tricolored French flag. Following this he issued an ordinance arranging for the provisional government of Corfu and establishing himself as commander general of the island. After this ordinance, the Republic of the Seven Ionian Islands became a province of the French Empire.

England, at this time allied with the other powers against Napoleon, began a blockade of the Ionian Islands which diminished commerce and brought poverty to the population. These conditions raised voices of discontent against the French and also gave rise to a movement seeking another protector among the great powers, which of course could be neither Russia or Turkey. The hopes of the islanders, raised by the many promises given by England, were expressed in a plea signed by the nobles of Zante and Cephalonia and addressed to the Admiral Commander of the English fleet in the Mediterranean. This document requested that English forces occupy the islands to save them from the misery of their current conditions.

In September, 1809, three English men-of-war arrived at Zante carrying 3,000 soldiers under the command of General John Oswald. The island was occupied after a short resistance by the French garrison. With the same ease, England also conquered Cephalonia, Cerigo and Ithaca, and on all those islands provisional governments were established and the flag of the State of the Seven Islands was raised again. In April, 1810, after many attacks and many sacrifices, the English army conquered Santa Maura and in February, 1814, Paxo. The last stronghold of the French was Corfu, but its conquest was very difficult, not only because of its strong fortifications, but also because, due to the strategic importance of its location, Napoleon concentrated considerable forces there, amounting to 10,000 men.

When, after the defeat of Napoleon's forces on the European fronts and his abdication, the allies entered Paris and restored the Bourbon dynasty to the throne of France by the treaty signed April 11/23, 1814, the frontiers of France had shrunk to the position where they had been before 1792. As a result, the Ionian Islands, now beyond the frontiers of the French state, were delivered to Great Britain.

On April 24/5 the tricolored French flag was lowered from the ramparts of the forts of Corfu and flag of the Bourbons was raised. Not long after, the general of Louis XVIII, Boulois, arrived and replaced General Donzelot in command. General

Boulois, by order of his king, surrendered the forts and the city of Corfu to Sir James Campbell on June 12/24. Thus, the occupation of all the Ionian Islands was completed by Great Britain.

After many discussions in the Council of Vienna and later in Paris, the Treaty of Paris signed by Great Britain, Russia, Austria and Prussia on November 24/5, 1815, decided finally the future of the Seven Islands. They and their dependencies on the Greek mainland, which were included in the treaty of March 21, 1801, became the "United States of the Ionian Islands" under the exclusive protection of Great Britain. The Union Jack flew above the forts of the Seven Islands until May 21, 1864, when it was finally lowered and the flag of Greece was raised, greeted by British cannon. The hopes and the tears of joy of a liberated part of Hellenism accompanied this rising blue and white symbol of the reborn nation.

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THE BLACK DENARIUS

While stationed in Turkey I had the good fortune to buy a patinated denarius of Faustina Sr. The patina is glossy black and is complete over the entire coin. Although I had seen and handled many denari I had never seen, or heard, of a silver coin accumulating a hard glossy patina. Upon first inspection, I thought the coin might be a small bronze which carried the same obverse and reverse as the denarius. A thorough search revealed no bronze of this size, image and inscription. The coin is EF/EF except for a slight gouge, also covered with patina, on the reverse and is identified as C-93 (Sear 1250) except that CERES stands left instead of right.

Not too long after I purchased the Faustina Sr, I ran across a black patinated denarius of NERVA. The patina on this piece, although not quite as glossy, completely covers the coin except for one tiny nick on the edge which reveals the silver beneath. This coin is also EF/EF and is identified as C-6 BMC-24 (Sear 849).

Both pieces were purchased from Turkish men who had no knowledge of where or under what circumstances the coins were unearthed other than the fact that they were found in the general vicinity of Adana, Turkey. I find both pieces to be exceptionally beautiful and would be interested in knowing of other patinated silver denarius. I would also like any information available as to what combination of chemicals would cause silver to form a patina. WILLIAM F. HADLEY

FURTHER NOTES ON CARTHAGE: OBV. — NUMISMATIC: RX — ANCIENT HISTORY

While investigating the theory that several Phoenician coins bear portraits of Carthaginian generals, it was necessary to cover a good share of the ground gone over so ably by Lawrence Healey ("Western Punic Mints") in the April *Turtle*.

Other notes on Carthage concern its origin. When Dido, or Queen Elissa, fled Tyre and attempted to found a settlement at the site that became Carthage, she got her project off to a poor start. She antagonised the local ruler, Prince Hiarbas (or Hyarbas) of Utica, from whom she hoped to buy the required land, and he, stung by her regal airs, flatly refused to sell her anything. As a further insult, he specified that she might have — as a gift — all the land she could cover with

an untanned bull's hide, or *byrsa*. Someone in her party was clever enough to suggest that she have the hide cut in as thin a running strip as would hold together, and the resulting thong of green hide was stretched to encircle the limits of her city. The first building to go up was the citadel, which was named Byrsa. Virgil, in his Aeneid, explains:

"There bought a space of ground,
which (Byrsa call'd
"From the bull's hide) the first
inclos'd and wall'd."

To finish the story of Dido. Prince Hyarbas later paid court to her, and tho politically she couldn't refuse him, personally she found it impossible to accept him, and it was to escape this untenable position that she threw herself on her funeral pyre. Betty Davidson

ON PUBLISHING A NUMISMATIC JOURNAL . . .

I read with much interest your editor's page in the May issue of *The Turtle*. I can quite well sympathize with you and your troubles — as of course I have a few of them myself.

For our Summer 1967 issue, the deadline to me from my assistants and other officers, was May 15. By the time I got the last of the material edited (and in some cases re-typed) and got it to the printers — got back proof copies — checked the proof copies and dummied up the 40 pages: then checked the printer's page proofs and returned them - - then waited for the printing and bindery work to be done — and for the mailing service to do their stuff: plus the post office — It was June 15 before the first copies were received by any of our members.

A peculiar thing none of us can figure out — I give the mailing service various instruction each issue, also tell them that after the regular membership copies have been mailed out, to send a certain number of extra copies to me and to each of my two assistants, and the balance to the secretary. These parcel post packages are always received by all of us from two to seven days before we get out regular membership copy. How come? Don't ask me!

All I can say is — Thank the Lord *Calcoin News* is a quarterly. How you manage to get out an issue every month is beyond me — seems to me that you must be working on at least three different issues at a time.

Anyway, best regards to you and keep up the good work you are doing on *The Turtle*.

Les Lodge, Editor "Calcoin News"

An Introduction to the Archaeological Study of Greek Coins

H. N. Fowler and J. R. Wheeler[1]

IMPORTANCE OF COINS

The study of Greek coins is of especial importance and may almost be regarded as a distinct science. More than any other branch of archaeology it demands wide and accurate knowledge of ancient history and literature, and at the same time it serves to increase the literary and historical knowledge of those who devote themselves to it. Coins, showing as they do the changes in the political, commercial, and religious affiliations of various cities, often serve to correct or confirm the statements of the ancient historians, and shed many rays of light upon the dark places of Greek religion and mythology. Regarded as works of art, they have a great advantage over most of the extant works of Greek sculpture, because they are originals, not copies. Even now, after the many important discoveries of the past few decades, Greek sculpture is known to us in great measure through Roman copies; but Greek coins have been preserved in a continuous series from the seventh century B.C. until Greek art loses itself in the barbarism of the Middle Ages. Since they exist in great numbers, and many of them are almost as fresh as when they came from the mint, they form an exceptionally instructive series of works of minor Greek art. Moreover, the fact that the coins can almost always be assigned to definite dates and places adds greatly to their value. As works of art, they are to be classed as small reliefs, and a careful and intelligent study of them makes the student acquainted with the whole course of Greek sculpture in miniature. Furthermore, later coins reproduce some of the most important works of monumental art. For many reasons, then, the study of Greek coins is of the greatest importance to the archaeologist.

The history of the development of Greek coin standards is a difficult study, which belongs rather to the metrologist than to the student of ancient art, but even the student of art should know enough about the metals, the standards, and the methods employed in ancient mints to aid him in assigning dates and places to coins. A few pages must therefore be devoted to

[1] From the "*Handbook of Greek Archaeology*," (1909) chapter VI. Corrected and simplified. All footnotes are added by the editor (except No. 5).

these and kindred matters before turning to the artistic development of the coins themselves.

METALS USED

The metals used by the Greeks for their coins are gold (AU), silver (AR), copper or bronze (AE), and electrum (EL). The last is an alloy (in most cases, at least, natural) of gold and silver. Of these metals gold was used in a very pure state, being sometimes almost absolutely unalloyed. The Persian darics contain only three per cent of alloy, and other gold coins of the ancients are equally pure. Silver also was used with much less alloy than is contained in modern coins. So the Athenian tetradrachms of the best period are about .985 fine, those of the period after Alexander about .950 fine, Aeginetan and Corinthian staters about .961 fine, and Alexander's silver pieces about .967 fine. Electrum, sometimes called *white gold* (Chrysos leukos) was regarded as a distinct metal. The proportions of the gold and silver contained in it vary greatly. Sometimes it contains 95 per cent of gold and again not more than 5 per cent; but the most usual proportions vary between 52.25 per cent of gold to 47.75 per cent of silver and 27 per cent of gold to 73 per cent of silver. This metal was used especially in regions where gold alloyed with silver was a natural product, as in Lydia and Lesbos, at Cyzicus, and at Phocaea. Copper or bronze was the metal most widely employed. The ancients called copper and its various alloys (bronze, brass, etc.) made with tin, zinc, and other metals indifferently by the same name *(chalkos, aes)*. In Greek coins the copper is usually mixed with a little tin or zinc. In early times, iron bars are said to have been used as money, and iron money continued in use at Sparta after it was generally superseded by gold, silver, and copper. A few iron coins have been found belonging to Heraea and Tegea, in Arcadia, and iron coinage is mentioned by ancient authors. It cannot, however, have been usual, nor can coins of tin, lead, leather, or other materials have been of any general importance. We have to consider only the coins of gold, electrum, silver, and copper, and since copper coins have for the most part suffered so much from oxidation that their types are obscured, our attention will be directed chiefly to the coins of the precious metals, among which the silver coins are by far the most well preserved.

PROCESS OF COINING

The process of manufacture was simple. A blank *(flan)* of metal of the desired weight was prepared by casting, and was placed upon a die, in which the type or design of the obverse

(face or "head") of the coin had been engraved. This die was set in, or placed upon, an anvil. A punch, roughened to prevent it from slipping, was then held upon the reverse (back, "tail") of the blank and struck with a hammer until the metal of the coin was forced into the engraved die. In some cases the edge of the blank was cut with shears or some other sharp instrument, because the weight obtained by casting was not exact. The coin was struck while the metal was red hot and therefore comparatively soft. In this way the number and violence of the necessary blows was reduced and the wear of the die correspondingly diminished. Since no ancient Greek dies are preserved, the material of which they were made is not known with absolute certainty. In early times it was doubtless some kind of bronze, but in the best days of Greek coinage it may well have been steel, which would then have been cut by the methods of the gem engraver, with a wheel and emery sand. In fact, some coins show clearly the round holes made by this process.

SHAPES AND DESIGNS

The earliest coins have no type (design) on the obverse further than mere striations, and the reverse shows a rough oblong depression between two square depressions. These are the marks left by the end of the punch which received the blows of the hammer. The shape of these coins is oval or lenticular, and they are much thicker than the coins of later times. As time went on the circular form was adopted, and the coins were made thinner than at first, but Greek coins were always thicker than our modern coins, and the circular form was never exact, as it is in the products of modern mints, for the Greeks did not drop the blank into a circular frame or collar, but left it free to spread. The design of the obverse is from a very early period a real work of art, while the mark of the punch on the reverse remains a mere incuse square, or (as in the Lydian coins an incuse oblong between two squares, or an incuse square with various divisions. Soon, however, the punch becomes virtually an upper die for the reverse, small designs are inserted in the incuse square, then the incuse square is given up, and in the coins of the best period the reverse has a type little, if at all, less beautiful than that of the obverse.

STANDARDS

Since the purpose of coinage is to facilitate commerce, it is important that the weights or standards of coins be fixed and be known by those who are to use them. The standards of Greek coins are probably all derived from Babylonia, but in passing from Babylonia to Greece the weights underwent vari-

ous changes. As a result we find a variety of standards in use in Greece and the neighboring countries. For the coinage of silver, which was the most important, the chief standards employed in Greece proper were the Aeginetan, the stater of which weighed 12.60-11.90 grammes, and the Euboic (Attic, Corinthian), the stater of which weighed 8.75- 8.15 grammes. In the Pangaean district of Thrace a stater weighing about 10 grammes was in use; the Macedonian standard gives a weight of 14.50 grammes, and the staters of some of the Asiatic cities and their colonies were struck acording to the Phoenician standard, and weigh 14.90 to 14.25 grammes or a little less. Rhodes and Chios had local standards. Other cities employed the Persian standard (stater 11.50 grammes). For the coinage of gold, a stater of 8.4 grammes was almost universally used. In Etruria, as well as in some cities of Magna Graecia and Sicily, native standards were employed, and in the time of the Roman Empire the Roman standard spread throughout the civilized world. The weights of many coins are now no longer exact, on account of wear, which has diminished them, or oxidation, which has increased them. There was, moreover, a general tendency to diminish the weight of coins as time went on. As a rule, however, it is not difficult to determine the standards of the various coins. This is a matter of more importance than appears at first sight, because the standard of coinage often throws light upon the history of the Greek cities and the course of ancient trade, since those cities which were closely connected by commerce would naturally adopt the same standard of coinage to facilitate exchange. So the earliest coins of Cumae, Rhegium, Naxus, Zancle, and Himera (all colonies of Chalcis) follow the Aeginetan, not the Euboean, standard, and Corcyra, a colony of Corinth, adopted the same standard, though in a reduced form. At a later period the Attic standard became more and more generally adopted as the power and commercial importance of Athens increased in the Greek world, though even then the Aeginetan standard continued in use in some places.

DIVISIONS

The divisional systems adopted by the Greeks and the names given to the coins of each denomination are very various. In Athens the unit of value was the drachma (1½ the Attic Euboean-Corinthian stater). The drachma was divided into 6 obols. Coins were struck of the following denominations: 10, 4, and 2 drachmas, 1 drachma, 5, 4, 3, 2, 1½ obols, 1 obol, ¾, ½, ⅜, and ¼ obol, and a bronze coin, the hemitetartemorion, or *chalkous*, which was worth only ⅛ obol. At

Corinth, and places which derived their coinage system from Corinth, the stater, which was equal to two drachmas in Attica, was divided into three drachmas, two of which thus were practically equivalent to one Aeginetan drachma. In some of the Asiatic currencies also the stater was divided into thirds and sixths, as in the important electrum currencies of the fifth and fourth centuries B.C. at Cyzicus, Phocaea, and Lesbos. Besides the multiples of the drachma employed in the currency of Athens, any others could be used that convenience or love of display might suggest. So pieces of 3, 5, 6, 8, 10, and 12 drachmas are found at various times and places, but the larger denominations seem to have been seldom struck except on special occasions or by rulers or peoples who delighted in ostentation. So some of the Ptolemies struck gold octodrachms, some of the Thracian tribes struck silver octodrachms, and among the coins of Sicily the Syracusan silver decadrachms are justly famous. As a rule, the denomination of Greek coins is indicated solely by the weight. The addition of numerals or the name of the coin (*drachma* or the like) is rare, except in the West or in late times. In a few cases the denomination is indicated by the type. So in a series of coins issued at Syracuse under Gelo the type of the reverse shows the denomination as follows: the tetradrachm (four drachmas) has a quadriga, the didrachm a horseman leading a second horse, the drachma a horseman, and the obol a wheel.

UNITS AND RATE OF EXCHANGE

The unit of Greek weights and currency was the stater or, to use the oriental term, the shekel. In speaking of large sums the words "Mina" and "talent" were used, but the mina and talent were weights, not coins. The stater was everywhere one fiftieth of the mina and the mina one sixtieth of the talent. A difference in the standards of weights coincides with a difference in standards of currency. The gold stater, weighing 8.4 grammes, is about equal in weight to the five dollar gold piece (129 grains) and slightly heavier than the English sovereign (123 grains), but the ancient coin contains less alloy and is therefore more valuable. The value of the silver coins depends upon the standard employed and upon the relation existing between gold and silver. The Aeginetan stater, for instance, was worth far from half as much again as the Attic stater (or didrachm). The rate of exchange between gold and silver varied at different times and places and was generally not fixed by law. At Athens in the fifth and fourth centuries B.C. it fluctuates between $11\frac{1}{2}$:1 and 14:1. Perhaps 12:1 may be regarded as the usual rate throughout the Greek world in classi-

cal times, though the popular idea seems to have been that gold was worth about ten times as much as silver. As values were usually reckoned by the Greeks in silver, it is impossible to give their modern equivalents unless we know what standard (Aeginetan, Attic, or other) is referred to, and even then the varying ratio of value between silver and gold causes complications.

EARLIEST COINAGE

The invention of coinage is ascribed with great probability to the Lydians, and the earliest coins were probably struck in the seventh century B.C. The great peoples of earlier times, Babylonians, Egyptians, and Phoenicians, had carried on their trade without the aid of coins, conducting their transactions by barter and by weighing the precious metals. No doubt bars or rings of metal of fixed weight were also employed, much as coins were used in later times. In fact, the difference between bars or rings of fixed weight and real coins consists merely in the design or type impressed upon the coins, by means of which the person or state issuing them guarantees their weight and quality. The earliest Lydian coins, with mere striations on the obverse and punch marks on the reverse, are, therefore, strictly speaking, hardly coins at all, since there is nothing about them to show clearly by whom they were issued. Probably their shape was at first a sufficient indication, and it was not long before distinct designs or types were added. The earliest coins were of electrum, but silver began also to be coined in the early part of the seventh century B.C. in towns and islands of Asia Minor, in the Cyclades, and at Aegina. These coins bear no inscriptions, but their types indicate the places of issue. The earliest coins of Aegina are said to have been struck by Pheidon, king of Argos, who, according to Herodotus, introduced measures (probably including weights) among the Peloponnesians, and who is said by later writers to have invented coinage. The date of Pheidon is uncertain, but the earliest Aeginetan coins belong to the seventh century B.C. Gold coins do not appear until the sixth century B.C. and were not common before the reign of Croesus, king of Lydia, 561-546 B.C. Copper coins, which are exceedingly numerous in later times, are not known until the end of the fifth century B.C.

TYPES

The use of coinage spread rapidly from the Lydians to their Greek neighbors, and coins were struck in nearly every independent Greek city. The types adopted were religious, for religion permeated the whole life of the Greeks, but in many

places the deities were represented not directly, but by signs or attributes. So at Metapontum the ear of wheat represents not so much the fertility of the city's territory as the reverence for the city's goddess, Demeter; at Rhodes the rose is a symbol of the sun god, not a mere pun on the name of the city (*rhodon*, "rose"). Such instances could be multiplied, and it is certain that in many, and probable that in all, cases in which the types of Greek coins appear to have no religious significance it is only our ignorance of the local cults which prevents our recognizing what was to the Greeks a clear reference to some deity. When deities are directly represented the type consists more frequently of the head than of the entire figure. Mythological scenes are rare. One of the most interesting is on a coin struck about 300 B.C. at Pheneus in Arcadia. Here Hermes is represented carrying the infant Dionysus and hastening on his way, not resting, as Praxiteles had portrayed him.

HISTORICAL REPRESENTATIONS

Historical representations do not appear until a comparatively late period, nor is it until Hellenistic times that the likenesses of kings and rulers appear on Greek coins though Persian coins show from the earliest times the effigy of the Great King. The representations of deities on Greek coins, whether as heads or as full figures, are not until comparatively late times intended as miniature copies of statues or other works. The head of Zeus on Elean staters of the fifth century is not a copy of the Zeus of Phidias, nor of any other statue, but an original work of the die cutter, who was, of course, a child of his time and much influenced by the sculpture of the period. So, too, the Hera on Argive staters is not to be regarded as an exact copy after the famous statue by Polyclitus. The dolphins and wolf on the reverse of this coin symbolize Apollo as Delphinius and Lycius respectively. But the Zeus Aëtophorus (Eagle-bearer) on the reverse of coins of Alexander, which was imitated with some slight variations by his successors, may be intended as a copy of an otherwise unknown statue, and there is much doubt that the obverse of the tetradrachms of Demetrius Poliorcetesis a copy of the Nike of Samothrace. The coin possibly celebrates the naval victory over Ptolemy, gained off Cyprus in 306 B.C. The reverse of the coin bears the figure of Poseidon, the sea god, in whose domain the battle was fought. In later times, copies of statues are not uncommon.[2] Among the best known are the head and

[2] See *Ancient Coins Illustrating Lost Masterpieces of Greek Art*. By Imhoof-Blumer and P. Gardner. Chicago 1965.

full figure of the Zeus of Phidias on coins of Elis issued under Hadrian, the Artemis of Ephesus on coins struck at Ephesus by Claudius and Agrippina, and the Cnidian Aphrodite on a coin of Caracalla and Plautina struck at Cnidus. Such direct copying of statues on coins is, however, not to be sought for in the period of Greek independence. Under the Romans, temples[3] and even larger objects, as, for instance, the Acropolis at Athens, were represented on coins.

INSCRIPTIONS AND SYMBOLS

In addition to the type, or chief design, Greek coins usually bear inscriptions and symbols or accessory designs. The inscription generally gives, either in the genitive case or in the form of an adjective, the name of the people or king by whom the coin is issued. Often the name[4] is abbreviated, as on Athenian coins, where AOE stands for *Athenaion* (gentive). Accessory inscriptions occur on many coins, denoting, as on late coins of Athens, the officials responsible for the issue or, in some instances, *e.g.*, the splendid Syracusan decadrachm of Evaenteus (where the name is in small characters below the head), the artist. The inscriptions were often so arranged as to form part of the decoration, occupying the space left vacant by the design. The symbols or accessory designs have sometimes apparently the same meaning borne on other coins by the accessory inscriptions, and indicate by a sign the responsible official; in other cases they are more important. Sometimes several Greek cities entered into a monetary union or alliance and issued coins which were either identical or only slightly distinguished. In the alliance between the cities of southern Italy in the sixth and the early part of the fifth centuries B.C. the coins were distinguished by their types, though alike in weight and fabric; in the monetary union between Phocaea and Mytilene, about 400 B.C., the Phocaean coins were distinguished by the addition to the type of a seal *(phoke)*, the symbol of Phocaea, while those of Mytilene bear the inscription M or VE (Lesbos); in the fourth century B.C. Side in Pamphylia and Holmi in Cilicia issued staters with the types of Artemis and Apollo, but distinguished them by symbols, Side using a pomegranate, Holmi a dolphin. Some earlier coins, bearing a pomegranate and a dolphin combined, were probably issued by two cities in conjunction. After the

[3] See, Donaldson, D. F. *Architectura Numismatica*. Chicago, 1966.

[4] For abbreviated ethnics see: Florance, A. *A Geographic Lexicon of Greek Coin Inscriptions*. Chicago 1966.

reorganization of the Achaean league, in 280 B.C., the cities of which it was composed gave up their previous coinages and issued coins of uniform type, distinguished only by inscriptions or symbols, So *e.g.* a coin of the Achaean league is recognized by the symbol of the wolf's head on the reverse as a coin of Argos, which joined the league in 228 B.C. The symbols are sometimes as important as the types themselves.

PERIODS OF DEVELOPMENT

The artistic development of Greek coins may be divided chronologically into the following periods: I. The period of Archaic Art, from the beginning of coinage to the retreat of the Persians from Greece, 700-479 B.C.; II. The Period of Transitional Art, from the retreat of the Persians to the end of the Peloponnesian War, 479-404 B.C.; III. The Period of Finest Art, from the end of the Peloponnesian War to the death of Philip, 404-336 B.C.; IV. The Period of Later Fine Art, from the death of Philip to the reorganization of the Achaean League, 336-280 B.C.; V. The Period of Decline in Art, from the reorganization of the Achaean League to the destruction of Corinth, 280-146 B.C. To these five periods two more may be added: VI. The Period of Continued Decline, from the destruction of Corinth to the rise of the Roman Empire, 146-27 B.C., and VII. The Imperial Period, from Augustus to Gallienus, 27 B.C.-268 A.D., after which the separate coinage of Greek cities practically ceased. The designations of some of these periods are not, and cannot be, exact, nor are the periods in reality sharply divided: the qualities of the art of each begin to show themselves in the one before and are still to be found in one after. Nevertheless, the division into periods has the advantage of preparing the student in advance for the general qualities he may expect to find at any given date. One must, however, not forget that the progress of art is continuous, and is not always greatly affected by even the most striking political events. Moreover, in some places art advanced more rapidly than in others, and development in the types of coins was sometimes (notably at Athens) hindered or prevented by the importance of preserving types which had acquired widespread reputation and circulation.

ARCHAIC PERIOD. EARLY TYPES

The earliest coins were speedily followed by coins with clear types, though the lentoid or bean-like form was for a short time retained. The types were for the most part not figures or even heads of deities, but symbolic representations, often animals or heads of animals, frequently more or less grotesque. Such a coin is the Phoenician stater of Miletus, the

obverse of which bears a lion's head, while the reverse is marked with an incuse oblong between two incuse squares. This, like most coins of this period, is of electrum. It probably belongs to the period of the highest prosperity of Miletus, before 623 B.C. The earliest inscribed coin, also an electrum stater, was found at Halicarnassus. It bears on the obverse a stag feeding and the inscription in retrograde letters, *Phanos emi to sema*, on the reverse an incuse oblonge between two incuse squares. The inscription has usually been translated "I am the sign of Phanes," and the Phanes mentioned has been regarded as a Halicarnassian, perhaps an ancestor of the Halicarnassian Phanes who deserted the service of the Egyptian king Amasis for that of the Persian Cambyses, whom he aided in his invasion of Egypt in 525 B.C. It has, however, been pointed out that the genitive *Phanos* does not belong to the masculine nominative *Phanes*, but rather to the feminine *Phano*, an epithet of Artemis. The stag is one of the regular attributes of Artemis. It is therefore probable that the coin is to be ascribed to Ephesus rather than to Halicarnassus. Throughout this period the reverse is almost always marked with an incuse square, which is often divided by lines and sometimes, especially toward the end of the period, contains a symbol or type. In some places the incuse square is retained in the second period, and it occurs even later. At different times within the first period several cities adopted the types to which they clung as long as they continued to coin money. So Thebes adopted the Boeotian shield, Aegina the tortoise, and Corinth a prancing Pegasus.

Heads of deities or human beings do not appear until the middle of the sixth century. The earliest coins of Corinth were issued probably in the reign of Periander, 625-585 B.C. The sign under the Pegasus is the letter koppa (the Latin Q), the initial letter of the name Corinth in the old alphabet. This letter was retained on the coins after the Ionic alphabet was introduced in all other writing. The incuse square is here so varied as to assume the form of a tetraskelion or swastika. Later coins of Corinth substitute for it a beautiful head of Athena or the armed Aphrodite. About the middle of the sixth century Athens began to issue silver coins with the head of Athena on the obverse and an owl on the reverse.[5] These are the earliest

[5] Earlier coins ascribed with much probability to Athens have various types (*owl, wheel, horse, amphora, triskelion, knucklebone*) on the obverse and on the reverse an incuse square divided into four triangles by diagonals. They are all called by one numismatic term: *Wappenmunzen*.

known coins with a type on each side. In later times these types were only slightly varied.

Throughout the archaic period the types of coins show qualities similar to those of the sculpture of the same epoch. The earliest work is rude, but as art advances the work grows finer and shows greater care and elegance. There are manifest faults in drawing, as in the contemporary relief work. So the eye is always given in full face, even when the head is in profile, the postures of human beings are more or less angular and unnatural, and the muscles are exaggerated. This last quality is especially noticeable in coins of Thrace and neighboring regions, such as the silver coins from Lete (*rev.* incuse square), but is present in greater or less degree in all coin types of the period which represent complete figures.

ITALIAN FABRIC

The coins are almost invariably thick and irregular in shape. A marked exception is seen in the coins of several cities of southern Italy. The style of manufacture, or, to use the technical expression, the fabric of these coins differs widely from that of the pieces struck in other regions. They are not thick, but flat, and instead of bearing on their two sides a type in relief and an incuse square or two different types in relief, they bear on the reverse an incuse reproduction of the type of the obverse. In some instances, as in the coins of Croton with a tripod in relief on the obverse and a flying eagle, incuse, on the reverse, and the federal money of Croton and Sybaris, bearing on the obverse the tripod of Croton in relief and on the reverse the bull of Sybaris, incuse, different types are employed without essential change in fabric. This remarkable method has the practical advantage of allowing the coins of the same issue to be piled one upon another, like the flat coins of modern times. The practical convenience, however, cannot have been great, as this fabric was soon given up, and these cities (with the exception of Sybaris, which was destroyed in 510 B.C.) began about 500 B.C. to issue thick coins, of smaller dimensions, with a type in relief on each side.

Since the art of coinage spread from the east to the west, the Greeks of Sicily and Italy naturally began to issue coins somewhat later than their more eastern kinsfolk. Some of the coins of the Chalcidian colonies in Sicily (Naxus, Zancle, and Himera) may belong to the last part of the seventh century B.C., but the coinage of nearly all the cities of southern Italy and Sicily begins little, if at all, before 550 B.C. This accounts in part for the fact that their first coins are finer than the

earliest issues of the more eastern Greeks, but does not explain the remarkable development of Sicilian coinage in the fifth and fourth centuries. Whatever the reason may have been, the Italian, and especially the Sicilian, Greeks seem from the first to have paid unusual attention to the beauty of their coins.

PERIOD OF TRANSITIONAL ART

Every period in the history of art is necessarily a period of transition from what precedes to what follows it, for art is never stationary, but always progresses to something better or degenerates to something worse. Nevertheless, the transitional nature of the coin engraver's art between the defeat of the Persians and the end of the Peloponnesian War is especially manifest. In the earlier coins of this period the style is still archaic, the eye is represented as if seen from the front when the head is in profile, the forms, attitudes, and muscles of human figures are stiff and exaggerated: in short, the qualities which distinguish the period before the Persian Wars are still present, but are becoming slightly less prominent. The incuse square on the reverse is still common, especially in the East, and in general the coinage of the East is more conservative than that of the West. By the end of the period nearly all coins show complete mastery of technique, natural treatment of the eyes, muscles, and other details, graceful postures when entire figures are represented, and designs perfectly adapted to the round space they have to fill. Even in the first period the design was usually well adapted to the space, but in this respect, as in all others, the fifth century shows a marked advance.

ATHENIAN COINAGE

One might expect that at Athens, where under the règime of Pericles, art of all kinds was encouraged as never before, where the Parthenon was rising in its matchless beauty to enshrine the glorious gold and ivory Athena of Phidias, where Myron was perfecting the representation of animals and of the human form in motion, while Alcamenes was rivalling his great master, where Polygnotus and Apollodorus were producing pictures which may perhaps have equalled the sculptured frieze of the Parthenon, and where even the humble painters of vases were artists and consummate draughtsmen, — one might expect that at Athens new and perfectly beautiful coin types would be created. But this is not the case. As the power of Athens grew, her commerce also increased, and the excellence of her coinage was everywhere recognized. Athenian "owls" so-called from the type of the reverse, were the staple

(to be continued)

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